## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



# THE INSECT PEST SURVEY

MAR 22 1929

#### BULLETIN

A periodical review of entomological conditions throughout the United States issued on the first of each month from March to December, inclusive.

Volume 9

March 1, 1929

Number 1

BUREAU ENTOMOLOGY OF STATES UNITED AGRICULTURE DEPARTMENT OF AND THE STATE ENTOMOLOGICAL AGENCIES COOPERATING

12-9-21

production of the

## 323364

COLLABORATORS OF THE UNITED STATES DEPARTMENT OF AGRICULTURE ACTING AS REPORTERS FOR THE INSECT PEST SURVEY, 1929

	Alabama	Dr. J. M. Robinson, Department of Entomology and Zoology, Alabama Polytechnic Institute, Auburn.
	Arizona	Dr. Oscar Bartlett, State Entomologist, P. O. Box 1857, Phoenix
	Arkansas	Dr. W. J. Baerg, Entomologist, Agricultural Experiment Station, Fayetteville.
	California	Dr. W. B. Herms, Head of Division of Entomology and Parasitolog University of California, Berkeley.
		Mr. H. S. Smith, Entomologist, Citrus Experiment Station, Riverside.
	Colorado	Dr. C. P. Gillette, State Entomologist, State Agricultural College, Fort Collins.
	Connecticut	Dr. R. E. Britton, State Entomologist, Agricultural Experiment Station, New Haven.
		Dr. E. P. Felt, Bartlett Rescarch Laboratory, Stamford.
	ida	Dr. H. L. Dozier, Entomologist, University of Delaware, Newark. Dr. Wilmon Newell, Plant Commissioner, State Plant Board,
		Gainesville,
	orgia	Mr. M. S. Yeomans, State Entomologist, State Board of Entomolog Atlanta.
	aiti	Dr. Roger C. Smith, Head, Department of Entomology, Service Tech nique, Department of Agriculture, Port-au-Prince.
	Idaho	Mr. Claude Wakeland, Entomologist, Entomological Field Station, Parma.
	Illinois	Dr. W. P. Flint, Chief Entomologist, State Natural History Survey, Urbana.
		Dr. T. H. Frison, Curator, State Natural History Survey, Urbana.
	Indiana	Prof. J. J. Davis, Purdue University, Lafayette.
	Iowa	Dr. Carl J. Drake, Department of Zoology and Entomology, Iowa State College, Ames.
	Kansas	Prof. Geo. A. Dean, Entomologist, Agricultural Experiment Station, Manhattan.
		Dr. H. B. Hungerford, Head, Department of Entomology, University of Kansas, Lawrence.
	77	Prof. J. W. McColloch, Entomologist, Kansas State Agricultural Colloge, Manhattan.
	Kentucky	Prof. Harrison Garman, Entomologist, Agricultural Experiment Station, Lexington.
	Louisiana	Dr. W. E. Hinds, Entomologist, Louisiana State University, Baton Rouge.
	Maine	Mr. C. R. Phipps, Agricultural Experiment Station, Orono.
	Maryland	Prof. E. N. Cory, State Entomologist, Maryland University, College Park.
	Massachusetts	Mr. A. I. Bourne, Agricultural Experiment Station, Amherst. Dr. H. T. Fernald, Agricultural Experiment Station, Amherst.
	Michigan	Prof. R. H. Pettit, Agricultural Experiment Station, East Lansing.
٠	Minnesota	Prof. A. G. Ruggles, Entomologist, University Farm, St. Paul.

Mississippi Prof. R. W. Harned, Entomologist, State Plant Board, Agricultural College. Missouri Dr. Leonard Haseman, Entomologist, Agricultural Experiment Station, Columbia. Montana Prof. R. A. Cooley, State Entomologist, Agricultural Experiment Station, Bozeman. Nebraska Prof. M. H. Swenk, State Entomologist, University of Nebraska, Lincoln. Mr. Don B. Whelan, Department of Entomology, University of Nebraska, Lincoln. Mr. L. M. Gates, Department of Agriculture, Lincoln. Nevada Mr. G. C. Schweiss, University of Nevada, Reno. New Hampshire Prof. W. C. O'Kane, Agricultural Experiment Station, Durham. New Jersey Dr. T. J. Headlee, State Entomologist, Agricultural Experiment Station, New Brunswick. Mr. Harry B. Weiss, Chief of Bureau of Statistics and Inspection, Department of Agriculture, Trenton. New Mexico Dr. J. R. Eyer, State Entomologist, College of Agriculture, State College. New York Prof. C. R. Crosby, Extension Entomologist, Cornell University, Ithaca. Mr. P. J. Parrott, Entomologist, Agricultural Experiment Station, Geneva. North Carolina Mr. Z. P. Metcalf, Head of Department of Zoology and Entomology, State College Station, Raleigh. Ohio Dr. E. W. Mendenhall, 97 Brighton Road, Columbus. Dr. J. S. Houser, Agricultural Experiment Station, Wooster. Dr. Herbert Osborn, Entomologist, Ohio State University, Columbus. Dr. R. C. Osburn, Entomologist, Ohio State University, Columbus, Mr. T. H. Parks, Extension Entomologist, Ohio State University, Columbus. Oklahoma Prof. C. E. Sanborn, Entomologist, Agricultural Experiment Station, Stillwater. Oregon Mr. Don C. Mote, Oregon Agricultural College, Corvallis. Pennsylvania Mr. A. B. Champlain, Bureau of Plant Industry, Harrisburg. Dr. T. L. Guyton, Department of Agriculture, Bureau of Plant Industry, Harrisburg. Mr. H. E. Hodgkiss, Extension Entomologist, Pennsylvania State College, State College. Mr. H. B. Kirk, Bureau of Plant Industry, Harrisburg. Mr. J. N. Knull, Bureau of Plant Industry, Harrisburg. Mr. G. F. MacLeod, Assistant Extension Entomologist, Pennsylvania State College, State College. Mr. Adonis A. Mathewson, Reitze Block, Meadville. Mr. F. F. Smith, Greenhouse Insect Laboratory, Easton Road,

Willow Grove.

Bustleton.

Mr. J. R. Stear, 68 N. 6th St., Chambersburg.

Mr. C. A. Thomas, Entomologist, Pennsylvania State College;

Mr. H. N. Worthley, Pennsylvania State College, State College.

Rhode Island Dr. A. E. Stene, Entomologist, Agricultural Experiment Station, Kingston.

South Carolina Prof. Franklin Sherman, Division of Entomology and Zoology, Clemson College.

Mr. Brunson , Extension Entomologist, Clemson College.

South Dakota Prof. H. C. Severin, State Entomologist, Agricultural Experiment Station, Brookings.

Tennessee Prof. G. M. Beotley, State Entomologist and Plant Pathologist.

Prof. G. M. Bentley, State Entomologist and Plant Pathologist, State Board of Agriculture, Knoxville.

Mr. F. L. Thomas, Agricultural Experiment Station, College Station.

Mr. H. J. Pack, Entomologist, Agricultural Experiment Station, Logan.

Mr. P. J. Chapman, Entomologist, Virginia Truck Experiment Station, Norfolk. Prof. W. J. Schoene, State Entomologist, Crop Pest Commission,

Blacksburg.

Prof. R. L. Wehster, Head, Department of Zoology, State

College of Washington, Pullman.
Prof. L. M. Peairs, Entomologist, Agricultural Emperiment

Station, Horgantown.

Prof. W. E. Rumsey, State Entomologist, Agricultural Emperi-

ment Station, Morgantown.
Mr. E. L. Chambers, State Entomologist, Room 14, Capitol

Annex, Madison.
Prof. H. F. Wilson, Entomologist, University of Wisconsin,

Madison,
Mr. F. W. Boyd, Chief Deputy State Entomologist, Laranie.

Dr. A. Dampf, Avenida Insurgentes 171, Mexico, D. F. Mexico. Dr. A. W. Morrill, Cajeme, Sonora, (California address: 815

Hill Street, Los Angeles,

Texas

Utah

Virginia

Washington

West Virginia

Misconsin

Wyoming Moxico



## INSECT PEST SURVEY BULLETIN

Vol. 9 .

March 1, 1929

No.1

OUTSTANDING DITCMOLOGICAL FLATURES IN THE UNITED STATES FOR JAMUARY AND FEBRUARY, 1929

With this number we introduce Volume 9 of the Insect Pest Survey Bulletin. We are gratified to see the continued growth in both quantity and quality of data which we are receiving and the ever-increasing cooperative attitude of our reporters.

These notes are available to any of our collaborators investigating specific problems. We do not feel that it would be advisable to devote the time of our very limited personnel to extracting extensive information for students. On the other hand, we are in a position to assist any serious worker in matters of geographical distribution, host plants, or other ecological data, and hope that our collaborators will feel free to call upon the survey for such service.

We now feel that the most rapid strides that can be made in survey work in this country will be along the lines of developing adequate State surveys, which can much more efficiently gather data necessary for a comprehensive National Survey. Such surveys, where they are already established, are of invaluable assistance to the entomological workers of the State concerned. They assist them in approaching their program of work, in answering correspondence, and give them an appreciation of the unusual developments in the various parts of the territory which they cover.

Despite the general impression that surveys are not possible without the expenditure of considerable funds and time, initial work along this line can be inaugurated at very little expense, and the Federal Insect Pest Survey is in a position, after its eight years of experience, to offer suggestions to any of its collaborators interested in inaugurating this type of work.

During the early spring months there have been but few unusual developments. During the first week in January serious cuttorm depredations were reported from the southernmost corner of Texas. About the middle of February cuttorm damage was reported from the Texas Panhandle and central Alabama.

The abundance of the chinch bug continues at a very low ebb.

From the middle to the end of February some alarm was created in Georgia and Morth Carolina by the green bug. This insect was also questionably reported from the southern part of Oklahoma.

From the number of eggs observed in Pennsylvania and West Virginia there are indications that aphids on deciduous fruits will be more numerous than usual in that region this spring.

Winter mortality of the codling moth in experimental cages at Carbondale, Illinois, ran to 24 per cent of overwintering larvae.

Throughout the eastern half of Pennsylvania severe red spider infestation this year is indicated by the abundance of eggs now present on the trees.

An interesting account appears in this number of the Bulletin of the discovery of a biological variety of the pear leaf blister mite in southern California.

The finding of what is believed to be Stephanoderes attacking coffee beans in Haiti is of very considerable interest, as this insect is one of the most serious pests of coffee in countries where it occurs.

The vegetable weevil has been found in 7 new counties in Mississippi, one of which is but 3 counties south of the Tennessee State line. It has also been found in 5 additional counties in Alabama and one additional county in Florida.

The spotted cucumber beetle attracted considerable attention during the last week in January, and throughout February, in the gulf trucking sections of Alabama, Mississippi, and Louisiana.

The banded cucumber beetle was first discovered in California in 1924, and was again observed attacking peppers at San Diego in 1927. Record is made of these findings, as they do not seem to have been previously published.

1 1 m

Reports from Louisiana indicate that the hibernating population of the sugarcane borer is unusually small this year.

## GENERAL FEEDERS

#### GRASSHOPPERS (Acrididae)

Arizona

. 0. L. Barnes (February 23): Grasshoppers were seen on February 21. This is the first time I have noticed insects since freezing weather began, but I suppose that they have been active on other warm days. Two individuals were seen.

#### CUTWORMS (Noctuidae)

Alabama

J. M. Robinson (February 18): At Auburn cutworms are present where vegetables have been grown. However, we have had very few requests for information on their control as yet.

Texas

F. L. Thomas (January 9): A telegram received from Raymondville in Willacy County states that cutworms are doing lots of damage to onions. (February 20): Cutworms were reported as attacking wheat in the Texas Panhandle, February 12. Many complaints have been made in the Lower Rio Grande Valley of cutworms injuring vegetable crops.

#### CEREAL AND FORAGE CROP INSECTS

#### WHEAT

## HESSIAN FLY (Phytophaga destructor Say)

Illinois

J. H. Bigger (February 20): In the western part of the State moderate damage is expected during the spring of 1929 where wheat has been set back by winter. Vigorous growth will probably not suffer.

Kansas

J. W. McColloch (February 19): The Hessian fly infestation is lower than it has been for several years, On the whole the average date of seeding was later. Lack of rain in August and September hindered seed-bed preparation. The absence of surface moisture held back sowing until rains in early October. While some fly can be found in nearly all parts of the State there has been very little damage. The heaviest infestation is apparently in the southeastern corner of the State.

## CHINCH BUG (Blissus leucopterus Say)

Kansas

J. M. McColloch (February 19): The chinch bug is at a very low ebb in Kansas. It is almost impossible to find bugs in hibernation this winter.

## GREEN BUG (Toxoptera graminum Rond.)

South Carolina J. N. Tenhet (February 26): Seriously injuring a 7 acre field of oats at Brunson. About 25 per cent of "stand" now dead, and remainder going fast.

Georgia

M. S. Yeomans (February 12): We have had a large number of complaints of damage on oats and wheat recently near Atlanta; caused by what may be the green bug.

Oklahoma

C. E. Sanborn (February 15): I have heard some reports relative to the prevalence of green bugs in the southern part of the State, but no specimens have been received by this department.

## APPLE GRAIN APHID (Rhopalosiphum prunifoliae Fitch)

Nebraska

M. H. Swenk (November 1 - January 1): A Richardson County farmer reported during the last week in November that patches in his winter wheat fields were dying out because of attack by a plant louse or aphid. Examination of specimens showed that the species concerned was the apple grain aphid.

## PLAINS FALSE WIREWORM (Eleodes opaca Say)

Kansas

J. W. McColloch (February 19): False wireworms probably caused more damage during the past fall than any other wheat insect. Throughout southwestern Kansas wheat stands were thinned and the early seeding destroyed. Replanting continued until the last of December. Incidental/we have received reports of injury at Spearman and Follett, Tex.

## CORN

## EUROPEAN CORN BORER (Pyrausta nubilalis Hbn.)

Rhode Island

A. E. Stene (February 24): The only insect that we have watched is the corn borer and that is apparently in condition to give us quite an infestation this year unless the growers clean up early in the spring.

## GRAPE COLASPIS (Colaspis brunnea Fab.)

Illinois

J. H. Bigger (February 20): Little damage is expected during the coming season in the western part of the State. The clover acreage during 1928 was small and the majority of it fall plowed.

#### VETCH

#### APHIIDAE.

Alabama

J. M. Robinson (February 18): During December, January, and early February the plant lice on vetch and Austrian peas have been active and have appeared in average numbers.

## ALFALFA

## PEA APHID (Illinoia pisi Kalt.)?

Arizona

O. L. Barnes (February 23): A few specimens of aphids were found on alfalfa on February 21, at Phoenix. These aphids were rather large, light green, and slender. I am of the opinion that the species is Illinoia pisi Kalt. They were hard to find in the fields examined.

#### FRUIT INSECTS

#### APPLE

#### APHIIDAE

Pennsylvania

H. E. Hodgkiss (February 15): Aphid eggs are very abundant, not only on water sprouts but on fruit spurs, and there seems to be but a very small percentage of the eggs collapsed at the present time. We are expecting a renewal of the outbreak of three years ago, since this condition has not appeared at all on the trees since 1925.

West Virginia

W. E. Rumsey (February 26): Aphid eggs on apples are rather common about Morgantown.

## CODLING MOTH (Carpocapsa pomonella L.)

Illinois

S. C. Chandler (March): On February 18, at Carbondale, in southern Illinois, 24 per cent of the codling moth larvae kept in corrugated strips in cages on the tree trunk were dead, possibly from low temperatures. The lowest temperature, at this point has been 2 degrees below zero.

California

Monthly News Letter, Los Angeles County Horticultural Commission, Volume 11, No. 2, February 15: Antelope Valley pear growers will attempt a night campaign against the ravages of the codling moth this spring by mounting high-powered lights on their spray rigs. Pear growers in the Valley have for several years been faced with the problem of covering a large acreage for codling moth control in a relatively short period. The period during which good control can be had with the calyx spray usually does not extend over ten days or two weeks and because there are not enough rigs in the Valley to thoroughly cover the or chards during this time there have been many instances of wormy fruit.

# CANKER WORMS (Paleacrita vernata Peck and Alsophila pometaria Harr.)

Kansas

R. L. Parker (February 14): We placed trap bands on the trees on January 12. This happened to be a day with temperatures

ranging in the 40's. That night our cold weather hit, and since that time there has been no emergence. On the day we banded the trees we collected one male fall canker worm, Alsophila pometaria Harr., and one male spring canker worm, Paleacrita vernata Peck.

EUROPEAN RED MITE (Paratetranychus pilosus Can. & Fanz.)

Pennsylvania

H. E. Hodgkiss (February 15): We have noted an abundance of eggs of the European red spider throughout the entire eastern half of the State, and in occasional orchards scattered through most of the western counties. In other words, we expect to have a continuation of our severe red spider infestation the coming spring.

SAN JOSE SCAIE (Aspidiotus perniciosus Comst.)

Pennsylvania

H. E. Hodgkiss (February 15): The San Hose scale is comparatively unimportant except in occasional unsprayed orchards.

Illinois

S. C. Chandler (March): This insect is reported to be quite scarce in the orchards in southern Illinois. In western Illinois the scale is moderately abundant in a few orchards, but is quite general in the orchards of the large apple-growing section in this part of the State. Counts made during the first part of February show from 30 to 35 per cent of the scale alive at that time. This is about the normal percentage for this time of the year.

Georgia

Oliver I. Snapp (February 20): On account of financial conditions a number of peach orchards have not been sprayed this winter for the San Jose scale. As a result, we look for this insect to increase in Georgia, followed by the abandonment of some orchards on account of the pest.

Alabama .

I. M. Robinson (February 18): The crawlers of the scale insects have been active on fruit at Auburn.

#### PEAR

PEAR LEAF BLISTER MITE (Eriophyes pyri Pgst.)

California

Monthly News letter, Los Angeles County Horticultural Commission, Volume 11, No. 2, February 15: William B. Parker reports in the December, 1928, issue of the Blue Anchor that he finds that there are two strains of the pear leaf blister mite attacking the pear trees in California.

Apparently there is no difference in their structure but their habits and the type of injury that they cause are quite different. Now will the usual control measures applied for the regular pear leaf blister mite, which consists of a spraying with lime and sulphur in the fall, be at all effective against the bud mite? It is quite possible that Los Angeles County has an infestation

of the bud form of the mite in a few pear orchards in the Antelope Valley. Horticultural Inspector W. L. Worthy of Los Angeles County has reported a type of injury to pears in some of the orchards in the Antelope Valley district which he believes is a similar type to that reported by Mr. Parker. Heavy infestation of the bud form of mite causes a russeting and in some cases a stunting of the fruit, as well as the dropping of bhossoms and young fruit and a dwarfing of both foliage and fruit.

Inspector Worthy recently selected specimens from pear orchards which have in the past shown a type of russeting and had determinations made through Mr. G. R. Gorton, Deputy Horticultural Commissioner of Los Angeles County. In each instance the specimen showed infestation of the pear leaf blister mite, and an attempt is being made by correlating the damage and infestations in the orchards to determine whether or not the mite is in the bud form found by Mr. Parker.

## PEACH

### PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Georgia

O. I. Snapp (February 20): From present indications we can expect an early insect season in Georgia. Peach buds are bursting two to three weeks ahead of the normal date. The chances are that the curculio will begin to leave hibernation early in March, and if so, we can look for two generations in Georgia. The winter has been unusually mild, and in all probability the mortality of insects in hibernation has been lighter than usual to date.

## FULLER'S ROSE BEETLE (Pantamorus fulleri Horn)

Georgia

M. S. Yeomans (February 12): The writer has also noticed in one particular peach orchard in the Fort Valley section a large number of Fuller's rose beetles. As high as 20 of these beetles were counted to a tree. They seem to be attracted to tecently pruned trees.

## TARNISHED PLANT BUG (Lygus pratensis L.)

Illinois

S. C. Chandler (March): Examinations made of hibernating tarnished plant bugs in mullein plants in southern Illinois show the bugs to be present in very small numbers, and peach cat-facing is not expected to be severe.

## ORIENTAL FRUIT MOTH (Laspeyresia molesta Busck)

Illinois

S. C. Chandler (March): On February 18, at Carbondale, in southern Illinois, 28 per cent of the oriental fruit moth larvae kept in corrugated strips in a cage entirely exposed to the weather were dead, possibly from low temperatures. The lowest temperature at this point has been 2 degrees below zero.

#### CHERRY

A SCALE INSECT (Possibly Aulacaspis pentagona Targ.)

Connecticut and New York E. P. Felt (February 23): This scale insect is locally abundant and injurious at Greenwich, Conn., and in the Bronx, New York City, and has apparently maintained a somewhat injurious status in these localities for a series of years.

#### PECAN

## PECAN COSSID (Cossula magnifica Streck.)

Mississippi

R. W. Harned (February 12): On January 16 a correspondent at Woodville sent to this office some larvae that proved to be those of the oak or hickory cossid. Regarding them the correspondent wrote as follows: "These borers were cut out of one live pecan tree from 1 inch toll2 inches from the ground. Tree about 12 years old. All trees found to be infested so far are live trees. We are locating them every day."

## WHITE ANTS (Rettculitermes sp.)

Alabama

J. M. Robinson (February 18): We had a request on February 13, asking for methods for the control of white ants attacking and destroying pecan trees near Unions Springs, the trees having been protected by posts driven in the ground in previous years. This very likely is the source of trouble.

#### CITRUS

## SCALE INSECTS (Coccidae)

Haiti

Roger C. Smith (February 22): In the last two weeks we have sprayed citfus trees for two species of scale insects. We do not permit the scale insects to become plentiful. They are comstantly present and spraying every month or two appears to be necessary.

## COTTONY-CUSHION SCALE (Icerya purchasi Mask.)

Louisiana

W. E. Hinds (February 23): The cottony-cushion scale was found present in the orchard at Baton Rouge, with specimens of Vedalia beetles also present in the same tree.

## PURPLE SCALE (Lepidosaphes beckii Newm.)

Louisiana

W. E. Hinds (February 23): An examination of citrus orchards in Plaquemines Parish, about 70 miles south of New Orleans, during the latter part of January indicated the presence of the purple scale quite commonly but the species is being held

partially in check by the abundant occurrence of red-headed fungus which commonly attacks this scale.

CITRUS WHITEFLY (Dialeurodes citrì Ashm.)

Louisiana

W. E. Hinds (February 23): The citrus whitefly was surprisingly scarce and the trees were quite free from sooty mold.

#### APHIIDAE ..

Haiti

Roger C. Smith (February 22): In the last two weeks we have sprayed citrus trees for aphids which have been sufficiently abundant : to cause large numbers of the younger leaves to be badly curled.

#### COFFEE

## COFFEE BERRY BEETLE (Stephanoderes sp.?)

Haiti

Roger C. Smith (February 22): However, more important perhaps is a very small beetle which attacks coffee berries while still on the bushes; we fear it is Stephanoderes. These small beetles bore into the beans and seriously damage them. Not so much coffee damaged as these beetles usually attack; has been found, but the beetle probably is capable of becoming a severe pest. Several other small beetles have been taken in coffee, but I believe they are scavengers or in some cases are attracted to moldy coffee.

## COFFEE TREE CRICKET (Probably new species)

Haiti

Roger C. Smith: (The coffee cricket is probably the most important coffee insect in Haiti (Fond des Negres) but actually it is of little consequence. The eggs are laid in May in tree cricket fashion in the young stems. They hatch from December on. Some of the eggs have hatched now (December 10), while many show advanced embryological development. Small brown and black ants enter the punctures and destroy about one-third of the eggs.

#### CASSAVA

## MANIOC FLY (Lonchaea chalybea Wied.)

Haiti

Roger C. Smith (January 28): A generation of these flies has just been completed and the manioc (Manihot sp.) on the experimental farm at Damien has been seriously damaged. The larvae bore into the young growing tips and kill them. The building the axil of the next leaf below begins to grow. Plants were seen today where twigs were thus injured twice.

#### TRUCK CROP INSECTS

## VEGETABLE WEEVIL (Listroderes obliquus Gyll.)

Mississippi

- M. M. High (January 30): The vegetable weevil has been found in 7 new counties in this state and are as follows: Holmes, Attaba, Carroll, Lowndes, Noxubee, Kemper, and Monroe. I would not be suprised to find the vegetable weevil further north than Monroe County, which is only 3 counties south of the Tennessee state line. The weevil is very abundant in Lowndes County just now and quite numerous in several of these other northern counties so to speak.
- R. W. Harned (February 12): Several complaints have been received recently regarding injury to turnips, mustard, rape, collards, and cabbage by the vegetable weevil. Specimens were received on January 24 from Bogue Chitto, and on February 2, from Hattiesburg. The correspondent from Hattiesburg wrote as follows: "Since they have about destroyed the mustard, turnips, and rape, they have gone to the collards."

Alabama and Florida M. M. High (February 26): The vegetable weevil was recently found in 5 more counties in Alabama and 1 additional county in Florida. In some instances the injury was severe, while in others it was only slight as yet. In Alabama the known new counties are as follows: Coffee, Dallas, Crenshaw, Geneva, and Wilcox, and, in Florida, Holmes.

## A WEEVIL (Listroderes apicalis Waterh.)

Mississippi

M. M. High (January 26): A single specimen of this half-brother of the vegetable weevil was found on January 19, at Grenada, by Mr. J. L. Tate.

## SPOTTED CUCUMBER BEETLE (Diabrotica duodecimpunctata Fab.)

Alabama

J. M. Robinson (February 18): The twelve-spotted cucumber beetle has been feeding on these winter legumes (vetch and Austrian peas) and depositing eggs. A small propoertion of the beetles have been parasitized by one of the Diptera.

Mississippi

M. M. High (January 26): The spotted cucumber beetle is now quite abundant on most truck crops along the Mississippi Coast, particularly turnip, mustard, lettuce, spinach, cabbage, etc.

Louisiana

W. E. Hinds (February 23): Adults of the 12-spotted cucumber beetles are very abundant and damaging the foliage of a number of winter-growing truck crops. These insects are active upon warm days throughout the winter in this section (Baton Rouge).

## BANDED CUCUMBER BEETLE (Diabrotica balteata Lec.)

Alabama

J. M. Robinson (February 18): <u>Diabrotica balteata</u> Lec. has been active on warm days, especially on spinach and other garden vegetables.

Arizona

A. C. Davis (January 14): This insect was collected by Mr. Warwick Benedict and myself at Yuma, on April 3, 1924, attacking alfalfa.

California

A. C. Davis (January 14): This insect was collected by Mr. Warwick Benedict and myself at Calipatria, on April 4, 1924, from alfalfa.

I took it again on peppers (Capsicum annuum) in the Mission Valley, San Diego, on September 22,1927. There was no apparent damage being done, although the beetles were quite numerous. Specimens were sent to the U. S. Bureau of Entomology for identification. In a letter dated April 18,1928, Mr. W. H. White, Associate Entomologist, says in part: "There is one very interesting occurrence, that of Diabrotica balteata Lec. collected at San Diego, Calif. I have been through some of the literature and have not been able to find this insect as recorded any farther west than Arizona."

#### LEAFHOPPERS (Cicadellidae)

Arizona

O. L. Barnes (February 23): Several species of Cicadellidae were observed to be feeding on various garden plants on February 21, although individuals were not numerous.

## MARCH FLIES (Bibionidae)

North Carolina

J. N. Tenhet (February 11): Feeding under fallen pine needles. Present in immense numbers in one patch of woods at Chadbourn. Pine straw was being gathered to use as mulch for strawberries. Larvae of this group of march flies have been reported as destructive to potatoes in Ireland.

## A MOLE CRICKET (Scapteriscus acletus R. & H.)

Mississippi

M. M. High (February 26): This species of mole cricket is again showing up in injurious numbers about Landon, Lyman, and Handsboro attacking cabbage, lettuce, and other vegetables.

#### TOMATOES

## LEAF SKELETONIZERS (Lepidopterons larvae)

Haiti

R. C. Smith (February 22): There are two leaf skeletonizers on tomatoes very abundant now. Both of these also attack tobacco. They attack the younger growth and therefore often kill the young plants. I noticed yesterday that about 50 of our plants had been killed by one species.

## TURNIP

#### TURNIP APHID (Rhopalosiphum pseudobrassicae Davis)

South Carolina M. H. Brunson (February 14): Aphis brassicas has been destructive on turnips and is fairly general over the State.

Alabama

J. M. Robinson (February 18): The turnip louse is quite abundant in turnip crowns at the present time.

Mississippi

M. M. High (January 26): The turnip aphid is doing serious damage to turnip, mustard, cabbage, and like crops through the State at this time. (February 26): The turnip aphid has been very abundant on turnip, radish, and mustard the past several weeks, but some growers have kept the injury down by dusting with nicotine dust on warm days. The pest does more or less injury in this State every month of the year.

R. W. Harned (February 12): Rhopalosiphum pseudobrassicae Davis on collard from Hattiesburg February 1.

Louisiana

W. E. Hinds (February 23): The turnip plant louse is extremely abundant and destroying stands of radishes, turnips, etc., in many localities in this State. Complaints are particularly strong from trucking areas in the vicinity of New Orleans.

Texas

F. L. Thomas (February 20): Turnip lice (Aphis pseudobrassicae Davis) were becoming abundant on turnips just before the recent cold spell occurred, February 8 - 10.

#### PENTATOMIDS

Alabama

J. M. Robinson (February 18): Certain pentatomids have been causing damage in the extreme southern part of the State to turnips.

## STRIPED FLEA BEETLE (Phyllotreta vittata Fab.)

Mississippi

M. M. High (January 26): The striped furnipsflea beetle (Phyllotreta vittata Fab.) is very plentiful this season at Gulfport and was observed to destroy several early plantings of turnips just after the plants had come up and before these attained a height of 3 to 4 inches.

#### CABBAGE

## CABBAGE WEBWORM (Hellula undalis Fab.)

Mississippi

M. M. High (January 26): The imported cabbase webworm (<u>Hellula undalis</u> Fab.) until the recent cool weather was doing serious injury to cruciferous crops over the State.

## CABBAGE LOOPER (Autographa brassicae Riley)

Mississippi

M. M. High (January 26): The cabbage looper has been unusually abundant the past few months on cabbage, collard, cauliflower, etc.

A CABBAGE LOOPER (Noctuidae)

Haiti

R. C. Smith (February 22): Cabbages are being severely attacked by the southern cabbage looper.

#### A CABBAGE STEM BORER

Haiti

R. C. Smith (February 22): We also have serious damage by a cabbage stem borer, two adults of which were sent to Washington today. It attacks turnips, radishes, and mustard in addition.

### A SKELETONIZER (Lepidoptera)

Haiti

R. C. Smith (February 22): There is also a skeletonizer on cabbage which was serious two weeks ago; but the local cabbage is beyond damage by it now.

### CABBAGE APHID (Brevicoryne brassicae L.)

Mississippi

R. W. Harned (January 4): On cabbage from McNeill. Determination made by A. L. Hamner.

Arizona

O. L. Barnes (February 23): Aphids, which from descriptions and appearance I believe to be <u>Brevicoryne brassicae</u> L., were very abundant on cabbage and cauliflower plants in the Salt River Valley, 5 to 10 miles west of Phoenix. The aphids were present in all stages from very young nymphs to adults, and many leaves were almost entirely covered by the insects.

## HARLEQUIN BUG (Murgantia histrionica Hahn)

Alabama

J. M. Robinson (February 18): The harlequin cabbage bug is appearing in the southern portion of the State in about the usual numbers.

Mississippi

M. M. High (January 26): The harlequin cabbage bug did considerable injury to turnip, cabbage, collard, etc., during December in central Mississippi and along the coast.

### STRAWBERRY

## A WIREWORM (Monocrepidius bellus Say)

North Carolina J. N. Tenhet (February 13): Present in considerable numbers under dead and dying strawberry plants in field about to grow up in weeds at Chadbourn.

#### BEANS

## BEAN WEEVILS (Mylabridae)

Haiti

R. C. Smith (February 22): Representatives of several species of bruchids which are by far the most important insects of red beans here (Haiti) were also sent to Washington for determination. They have lately been found to be abundant.

#### MELONS

## MELON WORM (Diaphania hyalinata L.)

Haiti

R. C. Smith (January 28): Another generation of this pumpkin leaf worm has just been completed at Damien. This injury was less serious than during the previous generation of the insect. (February 22): The pumpkin leaf worm is in between generations now, a large one having been completed in January.

#### SWISS CHARD

## GREENHOUSE LEAF TYER (Phlyctaenia ferrugalis Hbn.)

Mississippi

M. M. High (January 26): The celery leaf tyer (Phlyctaenia ferrugalis Hbn.) destroyed a planting of Swiss chard near Landon, and slight injury was done to cabbage and turnip crops in the vicinity.

## CARRÔTS

## FLEA BEETLES (Halticinae)

Arizona

O. L. Barnes (February 23): One flea beetle, species not determined, was seen on carrots in the Salt River Valley, 5 to 10 miles west of Phoenix.

#### LETTUCE

#### APHIIDAE

Arizona

O. L. Barnes (February 23): Several commercial lettuce fields were examined for insect pests February 21. Aphids, species not determined, were the only insects found, and they were not abundant, Only a few of the small, dark-green individuals were found on any one plant.

#### ONIONS

## ONION THRIPS (Thrips tabaci L.)

Arizona

O. L. Barnes (February 23): Nymphs of what I believe to be

Thrips tabaci L. were plentiful on onion plants in the Salt River Valley, 5 to 10 miles west of Phoenix, but damage was not noticeable.

#### PEPPER:

## PEPPER WEEVIL (Anthonomus eugenii Cano)

California

Monthly News Letter, Los Angeles County Horticultural Commission, Volume 11, No. 2, February 15: A recently completed survey of pepper fields in Los Angeles County, conducted by the Los Angeles County Horticultural Commissioner's Office, has shown practically all of the old plants to have been plowed under as a pepper weevil control measure. This procedure is in accordance with recommendations of Federal Entomologists.

#### SOUTHERN FIELD-CROP INSECTS

#### COTTON

## BOLL WEEVIL (Anthonomus grandis Boh.)

Louisiana

W. E. Hinds (February 23): Boll weevils have begun emerging from our hibernation cages at Baton Rouge. The first of these weevils were found active on the screens on February 11. Of course, no cotton is planted yet in the State and such early emerging weevils must either rehibernate or die within a few weeks.

## A CERAMBYCID BEETLE (Ataxia crypta Say)

Texas

F. L. Thomas (February 20): We have had many complaints in the late fall and during the winter of cotton stalk borers (Ataxia crypta) in cotton that had been killed or injured by root rot.

## PINK BOLL WORM (Pectinophora gossypiella Saund.)

Haiti

R. C. Smith (February 22): The pink boll worm has been found, by actual counts of large numbers of bolls from several varieties of cotton, to be especially scarce this year. The actual infestation will be less than 1 per cent. We do not have sufficient material to carry on our work.

## COTFON LUAF WORM (Alabama argillacea Hbn.)

Haiti

R. C. Smith (February 22): The cotton leaf worm is in the dormant stage now, but the generations are proceeding nicely in our cages. We have half-grown larvae of the eighth generation

since last August in our cages now. Most cotton has been picked once and some cotton several times, but even on the bushes with green leaves along irrigation ditches there are no leaf worms.

#### COTTON STAINER (Dysdercus suturellus H. Sch.)

Haiti

R. C. Smith (January 8): The cotton stainer began to cluster on the bolls about the middle of December at Port-au-Prince. They have been so abundant during the last two weeks that control efforts have been necessary. The bugs are picked or jarred into pans of kerosene. The very large numbers of nymphs attacking fallen bolls have been readily controlled with cyanogas. Considerable stained cotton occurs in early pickings.

(February 22): There are, however, large numbers of cotton stainers feeding primarily on the young bolls. This is the second generation of adults since last December and there are a good many third-generation nymphs in evidence.

#### SOUTHERN GREEN STINK BUG (Nexara viridula L.)

Haiti

R. C. Smith (January 9): A common pest in Haiti and attacking many plants. It was particularly abundant on cotton on the young bolls a few weeks ago at Damien and it is thought that their attack is a common cause of the dropping of bolls in the early stage of growth. Peas and tomatoes are also being attacked by this insect.

## RED SPIDER (Tetranychus telarius L.)

Haiti

R. C. Smith (January 8): Many plants are severely attacked by these mites at Port-au-Prince. A study is being made to find whether their distribution is correlated with the presence or absence of leaf pubescence. (February 22): The cotton leaf mite is now very abundant indeed in our experimental cotton. This is young cotton and not yet producing bolls.

#### TOBACCO

## HORN WORMS (Protoparce spp.)

Haiti

R. C. Smith (January 9): These worms have killed some plants and more or less completely defoliated others on the horticultural farm at Damien. They appear to be at their peak also on tohacco. A plantation at La Serre reported them to have been more troublesome lately. Tomatoes are also being attacked by these worms. (February 22): The horn worms are giving considerable trouble to tobacco, judged by the number of calls for lead arsenate.

TOBACCO LEAF SKELETONIZER (Species not determined)

Haiti

R. C. Smith (February 22): There are several tobacco leaf skeletonizers which I have somewhat confused in my mind in spite of the fact that all have been determined. In our own tobacco bed here (Port-au-Prince) from which we are about to make a planting, we are having exceedingly serious damage by two of them.

#### SUGARCANE

SUGARCANE BORER (Diatraea saccharalis Fab.)

Louisiana

W. E. Hinds (February 23): The sugarcane borer population in hibernation is usually small and there appears to be the prospect for an exceptionally light first generation of borers in Louisiana cane and corn this spring.

INSECTS ATTACKING GREENHOUSE AND

ORNAMENTAL PLANTS

BLACK VINE WEEVIL (Brachyrhinus sulcatus Fab.)

Washington

C. F. Doucette (February 5): This weevil was very prevalent in an outside planting of <u>Astilbe</u> sp. (the greenhouse spiraea, as usually termed in the florists trade) near Tacoma. Damage by the larvae of this weevil to cuttings of Taxus (yew) in a nursery propagating bed near Mt. Vernon was reported in December.

Larvae of this weevil, or a closely related species, were causing considerable damage to young sweet pea plants in a greenhouse at Sumner, during January. The larvae would kill the plants by eating all the roots and the seed peas. One cyclemen grower at Kent stated that he had lost over 1,000 plants during the fall months of 1928 from the attacks of the larvae of this weevil.

JAPANESE SPOTTED CAMEL CRICKET (Diestrammena japonica Blatch.)

Ohio

E. W. Mendenhall (February 7): This insect was found doing considerable damage to greenhouse plants, especially the succulent growth of the plants at Gahanna (Franklin County).

#### CHRYSANTHEMUM

CHRYSANTHEMUM GALL MIDGE (Diarthronomyia hypogaea Loew)

Ohio

E. W. Mendenhall (February 7): The chrysanthemum midge is held in check in most of the greenhouses in Springfield. Nicotine sprays and fumes seem to be more successful in combating the pests than anything found up to date.

Washington and Oregon C. F. Doucette (February 5): This insect has been very prevalent and caused injury to most of the chrysanthemum plantings in western Washington and Oregon during the past season. It has apparently been generally distributed among the greenhouse establishments because of the prevalent practice of swapping stock plants and cuttings, and the absence of serious attempts to control the infestation.

#### EUONYMUS

## EUONYMUS SCALE (Chionaspis evonymi Comst.)

Connecticut

E. P. Felt (February 23): This insect is locally abundant and appears to have wintered in large numbers at Stamford.

#### GLADIOLUS

#### APHIS Sp.

Iowa

C. N. Ainslie (February 14): Stored bulbs are attacked by numerous individuals of <u>Aphis</u> sp. at Sioux City. They obtain sufficient food to multiply on the bulbs and do noticeable injury to the growing tips.

#### LILY

## BULB MITE (Rhizoglyphus hyacinthi Boisd.)

Ohio

E. W. Mendenhall (February 12): This is on Easter lily, imported from Japan, and is found badly infesting the lily bulbs in one of the greenhouses in Dayton. In this shipment there were 5,500 bulbs and a large percentage of the plants are destroyed by the mites.

#### PALM

## PALM LEAF SKELETONIZER (Homaledra sabalella Chambers)

Haiti

R. C. Smith (January 3): This insect was not known before to occur in Haiti. Some Latanier palms on an estate near the city (Port-au-Prince) were badly damaged in November by these larvae. The next generation is now on the trees but the numbers are reduced.

## PHLOX AND CYCLAMEN

## GREEN PEACH APHID (Myzus persicae Sulz.)

Mississippi

R. W. Harned (February 22): This insect was reported on phlox from Mineral Wells, on January 29, and on turnip from Hattiesburg, February 1. Determination made by A. L. Hamner,

Illinois

C. C. Compton (December 20,1928): This aphid was causing severe injury to cyclamen at Des Plaines before it was discovered by the grower. Feeding almost entirely on buds and opening blooms. A single aphid on a bud sufficient to cause deformed bloom.

#### PITTISPORUM

## CCTTONY CUSHION SCALE (Icerya purchasi Mask.)

South Carolina M. H. Brunson . (February 14): This insect has killed several pittisporum plants of this location (Columbia). Has damaged plants in two consecutive years. Is not-a common scale in South Carolina.

## FOREST AND SHADE-TREE INSECTS

#### CAMPHOR

### CAMPHOR SCALE (Pseudaonidea duplex Ckll.)

Louisiana

W. E. Hinds (February 23): Complaints of camphor scale affecting camphors, japonicas, etc., have been received from several parties in the vicinity of Crowley. The infestation is extremely heavy judging from some of the samples received.

#### LARCH

## LARCH CASE BEARER (Coleophora laricella Hon.)

Connecticut and New York

E. P. Felt (February 23): This insect is very abundant upon some trees at Greenwich, Conn., and has been reported as generally present and numerous in the Poughkeepsie, N. Y., area.

#### MAPLE

## JAPANESE MAPLE SCALE (Leucaspis japonica Ckll.)

Connecticut and

E. P. Felt (February 23): The Japanese maple scale is becoming locally abundant and injurious upon Morway and soft maples at Rhode Island Greenwich, Conn., and has become established at Westbury, R.I.

## COTTONY MAPLE SCALE (Pulvinaria vitis L.)

Connecticut

E. P. Felt (February 23): The cottony maple scale is locally abundant upon soft maples, many of the inconspicuous young being apparently in excellent condition at the present time.

#### SPRUCE

## PINE LEAF SCALE (Chionaspis pinifoliae Fitch)

Nebraska

E. M. Gates (January 22): There was an extraordinary increase

of this insect during August, 1928, in the eastern part of Nebraska. Many trees which showed little or no infestation in July are now heavily infested. Spruce is most seriously affected but pines are also severely attacked.

#### TULIP

## TULIP TREE SCALE (Toumeyella liriodendri Gmel.)

Connecticut

E. P. Felt (February 23): The tulip tree scale is locally abundant, trees injured last year being infested at the present time with large numbers of partly grown young.

#### INSECTS ATTACKING MAN AND

#### DOMESTIC ANIMALS

#### MAN

## FLEAS (Siphonaptera)

Georgia

O. I. Snapp (January 24): Fleas are unusually abundant this year. A very heavy infestation occurred on a farm near Marshallville, where a 200' x 75' mule barn and other outbuildings were infested. They were also under residences. Mules, laborers, and families were greatly annoyed.

#### POULTRY

## BED BUG (Cimex lectularius L.)

Iowa

Carl J. Drake (February 14): The common bedbug has been found in a large number of chicken coops in Iowa during the past year and seems to be a rather common pest on chickens in the State.

## STICKTIGHT FLEA (Echidnophaga gallinacea Westw.)

Kansas

J. W. McColloch (January 22): A bad infestation of this flea is reported in a poultry flock at Hudson.

#### HOUSEHOLD AND STORED PRODUCT

#### INSECTS

#### TERMITES

Kansas

J. W. McColloch (February 19): Reports of damage by termites (Reticulitermes sp.) have continued to come in during the

winter. Woodwork in dwellings has been injured at Eureka, Wichita, Kansas City; and Hunnewell. The woodwork in a hotel at Manhattan was undermined, necessitating replacement in several rooms. Cherry trees are being killed by termites at Almena.

Texas

F. L. Thomas (February 20): Termites reported as injuring the sill of a dwelling in Houston.

Haiti

Roger C. Smith (January 19): Termites (<u>Cryptotermes brevis</u> Walk., <u>Nasutitermes morio</u> Latreille, and others) are a tremendously difficult factor to handle in buildings in Haiti (Port-au -Prince). The porch pillars of one of the main buildings of the Haitian General Hospital are being replaced with cement ones. The wood pillars have been badly damaged. Covered tunnels from ceiling to floor have been built during the last few weeks in the main building at Damien.

### POWDER POST BEETLES (Lyctus sp.)

Alabama

J. M. Robinson (February 18): From Cullman we have had a request for information on how to reduce the damage to flooring and finishings in homes from powder-post beetles.

## EUROPEAN BARWIG (Forficula auricularia L.)

Idaho

C. Wakeland (January 22): The specimen of European earwig collected at Parman was determined by us by comparison with specimens obtained from Portland.

#### STORED-GRAIN INSECTS

Kansas

J. W. McColloch (February 19): Stored-grain insects have caused much damage to wheat and are still abundant in bins and granaries. Much wheat has been forced on the market by infestation of weevils. Undoubtedly heavy losses will occur this spring. Reports have been received from the following counties; Smith, Russell, Republic, Mitchell, Cloud, Washington, Marion, Greenwood, Elk, and Johnson.

Nebraska

M. H. Swenk (November 1-January 1): Reports of stored-grain pests working in the new wheat continued to be received until about the middle of November, when these complaints ceased. The species concerned were Plodia interpunctella Hbn. and Tenebroides mauritanicus L.

## RICE WEEVIL (Calendra oryzae L.)

Alabama

J. M. Robinson (February 18): The corn weevil has been quite active and has done its share of damage in southern and central

portions of the State.

#### COFFEE

#### .. A DERMESTID

Haiti

R. C. Smith (February 22): It was commonly stated in Haiti that coffee was not attacked by any serious insect but, largely through the activity of the market specialist, we have discovered several important insect pests. One of them is a dermestid which I judge to be a species of Lasioderma. It was taken at Jacmel eating holes into the coffee beans in storage. Beans thus injured have been collected in many places over the southern part of Haiti, so it seems probable that this is widely distributed and that a pest of the first magnitude has been discovered.

#### A WEEVIL (possibly Mylabridae)

Haiti

R. C. Smith (January 6): This is the first instance known to the staff of damage to hulled coffee beans in Haiti. A small sample about 2 years old was found at Jeremie to be completely riddled. A black bean in the lot showed typical bruchid injury.

## COFFEE BEAN WEEVIL (Araecerus fasciculatus DeG.)

California

Roy E. Campbell (December 27,1928): 50 bags of green coffee beans arrived here (Los Angeles) in May, 1928, from Columbia, infested, but several hundred bags in the same warehouse from different countries were apparently uninfested. (Determination by Dr. E. A. Back.)

## RAW SILK

## A DERMESTID (Dermestes codaverious Fab.)

Illinois

C. C. Compton (February 16): Observed feeding on strands of raw tussah silk in Chicago factory. Also reported from Kinkaid.

## CAPPET BEETLE (Anthrenus sor civilariae L.)

Illinois

Co to compton (February 23): Severe injury to silk thread by larvae of carpet beetle reported from Chicago. Larvae bore into side of corner of spool of silk, severing the threads by cutting a clean round hole. Spools of large manufacturing size.